## Subject Index

## Volume 57 (1991)

*n*-alkanes, *n*-alkanols, fatty acids, charged alkyl compounds, phase transitions, 341

*n*-alkanols, *n*-alkanes, fatty acids, charged alkyl compounds, phase transitions, 341

allosteric regulation, biomembranes, phospholipids, cytoskeleton, 375

aminophospholipid translocase, phospholipid flip-flop, fluorescent lipids, spin-labels, 29

anaesthetics, phospolipid, bilayer, phase transition, fluctuations, lipid-cholesterol interaction, lipid-protein interaction,

asclepic acid, unsaturated fatty acid, polymorphic transformation, 67

bilayer, phospolipid, phase transition, fluctuations, lipidcholesterol interaction, lipid-protein interaction, anaesthetics, 179

bilayers, nuclear magnetic resonance, phospholipids, <sup>2</sup>H-NMR, <sup>13</sup>P-NMR, <sup>13</sup>C-MASS-NMR, model membranes, nonbilayer phases, lateral phase separation, 195

bilayers, phospholipids, phase transitions, polymer membranes, polymerization, 253

bile acid analogues, cholesterol  $7\alpha$ -hydroxylase, HMGCoA reductase, liver microsomes, 97

bile salts, bile salt micelles, calcium binding, calcium precipitation, murexide, gallstones, 17

bile salt micelles, bile salts, calcium binding, calcium precipitation, murexide, gallstones, 17

binary phase diagrams, order-function relationship, lipid mixtures, chemically driven phase separation, single channel current fluctuations, 363

biological membranes, infrared spectroscopy, phase transitions, 213

biomembranes, phospholipids, cytoskeleton, allosteric regulation, 375

biophysical inhibition, pulmonary surfactant, dipalmitoyl phosphatidylcholine, surfactant apoproteins, lipid-protein interactions, 49

calcium, dynamic light scattering, fusion, phosphatidylserine, phase transition, vesicles, 103

calcium binding, bile salts, bile salt micelles, calcium precipitation, murexide, gallstones, 17

calcium precipitation, bile salts, bile salt micelles, calcium binding, murexide, gallstones, 17

calorimetry, phospholipids, phase transitions, lipid bilayers, 241

charged alkyl compounds, *n*-alkanes, *n*-alkanols, fatty acids, phase transitions, 341

chemically driven phase separation, order-function relationship, lipid mixtures, binary phase diagrams, single channel current fluctuations, 363

cholesterol, vesicle aggregation, monovalent cations, divalent cations, phospholipid unsaturation, 59

cholesterol 7α-hydroxylase, HMGCoA reductase, bile acid analogues, liver microsomes, 97

compilation, fats, liquid crystal, mesomorph, polymorph, thermodynamic data, 275

crystal-to-liquid transition temperature, isothermal phase transition, effect of protonation, effect of hydration, effect of cation binding, 309

cytoskeleton, biomembranes, phospholipids, allosteric regulation, 375

differential scanning calorimetry, lysophosphatidylcholine, myosin, viscoelasticity, 81

dipalmitoyl phosphatidylcholine, pulmonary surfactant, surfactant apoproteins, biophysical inhibition, lipid-protein interactions, 49

divalent cations, vesicle aggregation, monovalent cations, phospholipid unsaturation, cholesterol, 59

dynamic light scattering, fusion, calcium, phosphatidylserine, phase transition, vesicles, 103 effect of cation binding, crystal-to-liquid transition

temperature, isothermal phase transition, effect of protonation, effect of hydration, 309

effect of hydration, crystal-to-liquid transition temperature, isothermal phase transition, effect of protonation, effect of cation binding, 309

effect of protonation, crystal-to-liquid transition temperature, isothermal phase transition, effect of hydration, effect of cation binding, 309

electrostatics, lipid monolayers, fluorescence microscopy, phase transition, shape transition, phospholipid domains, pattern formation, 227

fats, compilation, liquid crystal, mesomorph, polymorph, thermodynamic data, 275

fatty acid, fluidity, fusion, permeability, phosphatidylcholine, omega-3, omega-6, 87

fatty acid, hexagonal phase, lipid polymorphism, phosphatidylethanolamine, phase transition, 75

fatty acids, n-alkanes, n-alkanols, charged alkyl compounds, phase transitions, 341

flip-flop, lipid polymorphism, gramicidin, melittin, fusion, peptide-lipid interactions, 327

fluctuations, phospolipid, bilayer, phase transition, lipid-

cholesterol interaction, lipid-protein interaction, anaesthetics, 179

fluidity, fusion, permeability, fatty acid, phosphatidylcholine, omega-3, omega-6, 87

fluorescence depolarization, Langmuir-Blodgett films, stearic acid, nanosecond fluorometry, wobbling motion, orientation angle, 39

fluorescence microscopy, lipid monolayers, phase transition, shape transition, phospholipid domains, electrostatics, pattern formation, 227

fluorescent lipids, aminophospholipid translocase, phospholipid flip-flop, spin-labels, 29

fusion, dynamic light scattering, calcium, phosphatidylserine, phase transition, vesicles, 103

fusion, fluidity, permeability, fatty acid, phosphatidylcholine, omega-3, omega-6, 87

fusion, lipid polymorphism, gramicidin, melittin, flip-flop, peptide-lipid interactions, 327

gallstones, bile salts, bile salt micelles, calcium binding, calcium precipitation, murexide, 17

glycerylmonooleate, lipid/polypeptide interactions, hydrophobic helices, gramicidin-lipid complex, l

glycolipids, phospholipids, phase transitions, phase diagrams, lipid-water systems, 165

gramicidin, lipid polymorphism, melittin, fusion, flip-flop, peptide-lipid interactions, 327

gramicidin-lipid complex, lipid/polypeptide interactions, hydrophobic helices, glycerylmonooleate, 1

hexagonal phase, fatty acid, lipid polymorphism, phosphatidylethanolamine, phase transition, 75

HMGCoA reductase, cholesterol  $7\alpha$ -hydroxylase, bile acid analogues, liver microsomes, 97

hydration, phase transitions, surface electrostatics, lateral separation, model membranes, 293

hydrophobic helices, lipid/polypeptide interactions, glycerylmonooleate, gramicidin-lipid complex, 1

infinite periodic minimal surfaces, inverted hexagonal phase, spontaneous curvature, lipid phase transition, 147

infrared spectroscopy, biological membranes, phase transitions, 213

inverted hexagonal phase, infinite periodic minimal surfaces, spontaneous curvature, lipid phase transition, 147

isothermal phase transition, crystal-to-liquid transition temperature, effect of protonation, effect of hydration, effect of cation binding, 309

kinetics, lipid phase transitions, structure, mechanisms, nonequilibrium effects, synchrotron radiation, martensitic transformations, 121

Langmuir-Blodgett films, stearic acid, fluorescence depolarization, nanosecond fluorometry, wobbling motion, orientation angle, 39

lateral phase separation, nuclear magnetic resonance, phospho-

lipids, <sup>2</sup>H-NMR, <sup>13</sup>P-NMR, <sup>13</sup>C-MASS-NMR, model membranes, bilayers, non-bilayer phases, 195

lateral separation, phase transitions, hydration, surface electrostatics, model membranes, 293

lipid-cholesterol interaction, phospolipid, bilayer, phase transition, fluctuations, lipid-protein interaction, anaesthetics, 179

lipid-protein interaction, phospolipid, bilayer, phase transition, fluctuations, lipid-cholesterol interaction, anaesthetics, 179

lipid-protein interactions, pulmonary surfactant, dipalmitoyl phosphatidylcholine, surfactant apoproteins, biophysical inhibition, 49

lipid-water systems, phospholipids, glycolipids, phase transitions, phase diagrams, 165

lipid/polypeptide interactions, hydrophobic helices, glycerylmonooleate, gramicidin-lipid complex, 1

lipid bilayers, phospholipids, phase transitions, calorimetry, 241

lipid mixtures, order-function relationship, binary phase diagrams, chemically driven phase separation, single channel current fluctuations, 363

lipid monolayers, fluorescence microscopy, phase transition, shape transition, phospholipid domains, electrostatics, pattern formation, 227

lipid phase transition, inverted hexagonal phase, infinite periodic minimal surfaces, spontaneous curvature, 147

lipid phase transitions, structure, kinetics, mechanisms, nonequilibrium effects, synchrotron radiation, martensitic transformations, 121

lipid polymorphism, fatty acid, hexagonal phase, phosphatidylethanolamine, phase transition, 75

lipid polymorphism, gramicidin, melittin, fusion, flip-flop, peptide-lipid interactions, 327

lipid polymorphism, phospholipid bilayers, non-lamellar phases, lyotropic transitions, thermotrophic transitions, 109 liquid crystal, compilation, fats, mesomorph, polymorph, ther-

modynamic data, 275 liver microsomes, cholesterol 7α-hydroxylase, HMGCoA reductase, bile acid analogues, 97

lyotropic transitions, phospholipid bilayers, non-lamellar phases, thermotrophic transitions, lipid polymorphism, 109 lysophosphatidylcholine, myosin, differential scanning calorimetry, viscoelasticity, 81

martensitic transformations, lipid phase transitions, structure, kinetics, mechanisms, non-equilibrium effects, synchrotron radiation, 121

mechanisms, lipid phase transitions, structure, kinetics, nonequilibrium effects, synchrotron radiation, martensitic transformations, 121

melittin, lipid polymorphism, gramicidin, fusion, flip-flop, peptide-lipid interactions, 327

mesomorph, compilation, fats, liquid crystal, polymorph, thermodynamic data, 275

model membranes, nuclear magnetic resonance, phospholipids, <sup>2</sup>H-NMR, <sup>13</sup>P-NMR, <sup>13</sup>C-MASS-NMR, bilayers, nonbilayer phases, lateral phase separation, 195

- model membranes, phase transitions, hydration, surface electrostatics, lateral separation, 293
- monovalent cations, vesicle aggregation, divalent cations, phospholipid unsaturation, cholesterol, 59
- murexide, bile salts, bile salt micelles, calcium binding, calcium precipitation, gallstones, 17
- myosin, lysophosphatidylcholine, differential scanning calorimetry, viscoelasticity, 81
- nanosecond fluorometry, Langmuir-Blodgett films, stearic acid, fluorescence depolarization, wobbling motion, orientation angle, 39
- <sup>2</sup>H-NMR, <sup>13</sup>P-NMR, <sup>13</sup>C-MASS-NMR, nuclear magnetic resonance, phospholipids, model membranes, bilayers, nonbilayer phases, lateral phase separation, 195
- non-bilayer phases, nuclear magnetic resonance, phospholipids, <sup>2</sup>H-NMR, <sup>13</sup>P-NMR, <sup>13</sup>C-MASS-NMR, model membranes, bilayers, lateral phase separation, 195
- non-equilibrium effects, lipid phase transitions, structure, kinetics, mechanisms, synchrotron radiation, martensitic transformations, 121
- non-lamellar phases, phospholipid bilayers, lyotropic transitions, thermotrophic transitions, lipid polymorphism, 109
- nuclear magnetic resonance, phospholipids, <sup>2</sup>H-NMR, <sup>13</sup>P-NMR, <sup>13</sup>C-MASS-NMR, model membranes, bilayers, non-bilayer phases, lateral phase separation, 195
- omega-3, fluidity, fusion, permeability, fatty acid, phosphatidylcholine, omega-6, 87
- omega-6, fluidity, fusion, permeability, fatty acid, phosphatidylcholine, omega-3, 87
- order-function relationship, lipid mixtures, binary phase diagrams, chemically driven phase separation, single channel current fluctuations, 363
- orientation angle, Langmuir-Blodgett films, stearic acid, fluorescence depolarization, nanosecond fluorometry, wobbling motion, 39
- pattern formation, lipid monolayers, fluorescence microscopy, phase transition, shape transition, phospholipid domains, electrostatics, 227
- peptide-lipid interactions, lipid polymorphism, gramicidin, melittin, fusion, flip-flop, 327
- permeability, fluidity, fusion, fatty acid, phosphatidylcholine, omega-3, omega-6, 87
- phase diagrams, phospholipids, glycolipids, phase transitions, lipid-water systems, 165
- phase transition, dynamic light scattering, fusion, calcium, phosphatidylserine, vesicles, 103
- phase transition, fatty acid, hexagonal phase, lipid polymorphism, phosphatidylethanolamine, 75
- phase transition, lipid monolayers, fluorescence microscopy, shape transition, phospholipid domains, electrostatics, pattern formation, 227
- phase transition, phospolipid, bilayer, fluctuations, lipidcholesterol interaction, lipid-protein interaction, anaesthetics, 179

- phase transitions, biological membranes, infrared spectroscopy, 213
- phase transitions, hydration, surface electrostatics, lateral separation, model membranes, 293
- phase transitions, n-alkanes, n-alkanols, fatty acids, charged alkyl compounds, 341
- phase transitions, phospholipids, bilayers, polymer membranes, polymerization, 253
- phase transitions, phospholipids, calorimetry, lipid bilayers, 241
- phase transitions, phospholipids, glycolipids, phase diagrams, lipid-water systems, 165
- phosphatidylcholine, fluidity, fusion, permeability, fatty acid, omega-3, omega-6, 87
- phosphatidylethanolamine, fatty acid, hexagonal phase, lipid polymorphism, phase transition, 75
- phosphatidylserine, dynamic light scattering, fusion, calcium, phase transition, vesicles, 103
- phospholipids, bilayers, phase transitions, polymer membranes, polymerization, 253
- phospholipids, biomembranes, cytoskeleton, allosteric regulation, 375
- phospholipids, glycolipids, phase transitions, phase diagrams, lipid-water systems, 165
- phospholipids, nuclear magnetic resonance, <sup>2</sup>H-NMR, <sup>13</sup>P-NMR, <sup>13</sup>C-MASS-NMR, model membranes, bilayers, non-bilayer phases, lateral phase separation, 195
- phospholipids, phase transitions, calorimetry, lipid bilayers, 241
- phospholipid bilayers, non-lamellar phases, lyotropic transitions, thermotrophic transitions, lipid polymorphism, 109
- phospholipid domains, lipid monolayers, fluorescence microscopy, phase transition, shape transition, electrostatics, pattern formation, 227
- phospholipid flip-flop, aminophospholipid translocase, fluorescent lipids, spin-labels, 29
- phospholipid unsaturation, vesicle aggregation, monovalent cations, divalent cations, cholesterol, 59
- phospolipid, bilayer, phase transition, fluctuations, lipidcholesterol interaction, lipid-protein interaction, anaesthetics, 179
- polymerization, phospholipids, bilayers, phase transitions, polymer membranes, 253
- polymer membranes, phospholipids, bilayers, phase transitions, polymerization, 253
- polymorph, compilation, fats, liquid crystal, mesomorph, thermodynamic data, 275
- polymorphic transformation, asclepic acid, unsaturated fatty acid, 67
- pulmonary surfactant, dipalmitoyl phosphatidylcholine, surfactant apoproteins, biophysical inhibition, lipid-protein interactions, 49
- shape transition, lipid monolayers, fluorescence microscopy, phase transition, phospholipid domains, electrostatics, pattern formation, 227
- single channel current fluctuations, order-function relation-

- ship, lipid mixtures, binary phase diagrams, chemically driven phase separation, 363
- spin-labels, aminophospholipid translocase, phospholipid flipflop, fluorescent lipids, 29
- spontaneous curvature, inverted hexagonal phase, infinite periodic minimal surfaces, lipid phase transition, 147
- stearic acid, Langmuir-Blodgett films, fluorescence depolarization, nanosecond fluorometry, wobbling motion, orientation angle, 39
- structure, lipid phase transitions, kinetics, mechanisms, nonequilibrium effects, synchrotron radiation, martensitic transformations, 121
- surface electrostatics, phase transitions, hydration, lateral separation, model membranes, 293
- surfactant apoproteins, pulmonary surfactant, dipalmitoyl phosphatidylcholine, biophysical inhibition, lipid-protein interactions, 49
- synchrotron radiation, lipid phase transitions, structure, kinetics, mechanisms, non-equilibrium effects, martensitic transformations, 121

- thermodynamic data, compilation, fats, liquid crystal, mesomorph, polymorph, 275
- thermotrophic transitions, phospholipid bilayers, non-lamellar phases, lyotropic transitions, lipid polymorphism, 109
- unsaturated fatty acid, asclepic acid, polymorphic transformation, 67
- vesicles, dynamic light scattering, fusion, calcium, phosphatidylserine, phase transition, 103
- vesicle aggregation, monovalent cations, divalent cations, phospholipid unsaturation, cholesterol, 59
- viscoelasticity, lysophosphatidylcholine, myosin, differential scanning calorimetry, 81
- wobbling motion, Langmuir-Blodgett films, stearic acid, fluorescence depolarization, nanosecond fluorometry, orientation angle, 39

## Author Index

## Volume 57 (1991)

Ahmed, N.	75	Kriechbaum, M.	121
Araiso, T.	39		
		Laggner, P.	121
Baatz, J.E.	49	Leung, S.O.	103
Barak, P.	17	Lichtenberg, D.	17
Baruch, E.	17	Lohner, K.	341
Belcher, D.	87		
Blume, A.	253	Mantsch, H.H.	213
Bosisio, E.	97	Marsh, D.	109
		McElhaney, R.N.	213
Caffrey, M.	275	Mittler-Neher, S.	363
Cevc, G.	293	Mouritsen, O.G.	179
Chen, R.	75	Moynihan, D.	275
Colleau, M.	29	Mukasa, K.	39
Crestani, M.	97		
		Nir, S.	17
De Fabiani, E.	97	Notter, R.H.	49
de Kruijff, B.	327		
Devaux, P.F.	29	Pfeiffer, W.	363
		Pullman, A.	1
Egelandsdal, B.	81		
Ehringer, W.D.	87	Rötzer, H.	363
Eikenberry, E.F.	147		
Eklund, K.K.	59	Sackmann, E.	363
Epand, R.F.	75	Sato, K.	67
Epand, R.M.	75	Schmidt, G.	363
		Shyamsunder, E.	147
Fasoli, L.	97	Silvius, J.R.	241
Fellmann, P.	29	Spinke, J.	363
Fretheim, K.	81	Spooner, P.J.R.	195
		Stillwell, W.	87
Gruner, S.M.	147	Suzuki, M.	67
		Takkunen, J.E.	59
Hall, S.B.	49	Tate, M.W.	147
Harbitz, O.	81	Tenchov, B.	165
Hasegawa, N.39	***	Tournois, H.	327
Hauser, H.	309	Tsuneta, R.	39
Henkel, T.	363	Turner, D.C.	147
Hervé, P.	29	,	
Ho, J.T.	103	Venkitaraman, A.R.	49
Hogan, J.	275		
		Wang, J.	1
shii, T.	39	Wassall, S.R.	87
		Watts, A.	195
Kimura, N.	39	Weis, R.M.	227
Kinnunen, P.K.J.	59, 375	Whitsett, J.A.	49
Knoll, W.	363		
Koyama, T.	39	Yoshimoto, N.	67

